

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Estimate Cost Rs.

3000000.00

of Work: Asphalting to road from 1st cross road at suggappa layout in Ward no-01
egowda of Yelahanka sub division

Description of item	Unit	No	L	B	D	Qty	Rate	Amount
SRRB M300-14. excavation for roadwork in all types of soil by mechanical means including digging and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 100 km and complete as per specifications. MORTH Specification No.301 Page 1 road	cum							
road reaches 1st cross road (suggappa layout)		1	3.50	2.50	0.30	2.63		
		1	2.00	2.50	0.30	1.50		
		1	3.20	1.50	0.30	1.44		
		1	3.80	1.50	0.30	1.71		
		1	5.20	3.60	0.30	5.62		
		1	3.80	2.90	0.30	3.31		
		1	15.00	1.20	0.30	5.40		
		1	3.60	2.20	0.30	2.38		
		1	15.00	1.80	0.30	8.10		
		1	8.00	3.50	0.30	8.40		
		1	9.00	3.20	0.30	8.64		
		1	6.00	3.80	0.30	6.84		
		1	6.60	4.20	0.30	8.32		
		1	16.00	1.50	0.30	7.20		
SSB UGD cutting portion		1	90.00	2.00	0.30	54.00		
Basic Rate	41.00					125.47	125.59	15757.50
Area Weightage 6%	2.46							
Grand Total	43.46							
loading and unloading + Basic Rate for Haulage upto 10 k.m = (1.28 X 2.50 X 8) +	77.48							
Area Weightage 6%	4.65							
	125.59							

Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
2-2.1 : Earthwork excavation by manual means for foundation of buildings, sewerage, water supply and sanitary lines and electrical conduits etc, either in pits or in trenches 1.5m and above in depth, in ordinary soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, backfilling the excavated soil up to edges of excavation on lead upto 50 m. including breaking of clods complete as per specifications. No. KBS 2.1 (a) I 5 page no 6	cum							
Culverts		1.00	11.00	1.65	1.20	21.78		
						21.78	399.07	8691.72
Basic Rate	299.00							
Area Weightage 6%	17.94							
Grand Total	316.94							
Loading and unloading + Basic Rate for Haulage upto 10 k.m = (1.28 X 2.50 X 8) +	77.48							
Area Weightage 6%	4.65							
	399.07							
RRB M300-19. Removal of serviceable soil including excavation, loading and disposal excluding replacement by serviceable soil which shall be paid separately as per clause 300.5 complete as per specification ORTH Specification 301KBS Page No.144 Item 19.2	cum							
ins								
cross road (suggappa out)		2	200.00	0.60	0.45	108.00		
cross road		2	165.00	0.60	0.45	89.10		
cross road		2	120.00	0.60	0.45	64.80		
cross road		2	73.00	0.60	0.45	39.42		
						301.32	36.04	10859.57
Basic Rate	34.00							
Area Weightage 6%	2.04							
Grand Total	36.04							

Description of item	Unit	No	L	B	D	Qty	Rate	Amount
RB 4-1.7 : Providing and in position plain cement concrete of Mix 1:3:6 with OPC 220kgs, with 20mm and down size graded granite metal coarse aggregates @0.69 cum and fine aggregates @ 0.56cum, machine mixed, concrete laid in layers not exceeding 15 cm thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification KBS 4.1, 4.2 Page No.13 Item No.4.7	cum							
culverts		1	11.00	1.50	0.15	2.48		
						2.48	5627.54	13928.16 ✓
Basic Rate	5309.00							
Area Weightage 6%	318.54							
Grand Total	5627.54							
Providing and laying in/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs, with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and foundations including centering, shuttering, cost of materials, labour, HOM of machinery, curing complete excluding cost of steel as per MORTH Specification No. 1500, 1700, including cost of materials, labour, HOM complete as per specifications. Item No.270. Item No.37.59.1	cum							
culverts Raft concrete		1	11.00	1.20	0.25	3.30		
culverts side walls								
		2	11.00	0.23	0.90	4.55		
						7.85	7273.72	57127.80 ✓
Basic Rate	6862.00							
Area Weightage 6%	411.72							

Description of item	Unit	No	L	B	D	Qty	Rate	Amount
Grand Total	7273.72							
RRB M 2200-6 Providing steel reinforcement for C.C work including straightening, cutting, bending, making, placing in position, joining and or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. RTH Specification No 1600 & 10 TMT Bars Fe 500 Page No 1 Item No 28.8.2 SR 2018-19	Tn							
RCC culvert 90 kg/cum		0.090	7.85			0.71		
			7.85			0.71	72326.98	51125.0491
Basic Rate	68233.00							
Area Weightage 6%	4093.98							
Grand Total	72326.98							
Moving & Refixing of the slabs of drains and putting in C.M (1:3) page no. 1. no-5.33	Sqm							
is road (suggappa out)		2	200.00	0.90		360.00		
cross road		2	165.00	0.90		297.00		
cross road		2	120.00	0.90		216.00		
cross road		2	73.00	0.90		131.40		
						1004.40		
available						703.08		
						703.08	111.30	78252.80
Basic Rate	105.00							
Area Weightage 6%	6.30							
Grand Total	111.30							

Description of item	Unit	No	L	B	D	Qty	Rate	Amount
Providing and Fixing pre cast Slab made out of CC 1:2:4 with 10cm thick and finishing cutting, including form work, cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc complete. (Data Rate)	Sqm							
Setting slabs								
at cross road (suggappa cut)		2	200.00	0.90		360.00		
at cross road		2	165.00	0.90		297.00		
at cross road		2	120.00	0.90		216.00		
at cross road		2	73.00	0.90		131.40		
						1004.40		
						301.32		
						301.32	2337.00	704184.84
Date Rate	2337.00							
Providing and Fixing pre cast Slab 250mm thick made out of CC 1:2:4 and jelly m Down size with steel reinforcement including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, and lift, transportation etc complete. As per Engineer estimate. (Data Rate)	Sqm							
culverts		1	11.00	1.20		13.20		
						13.20	5418.00	71517.60
Date Rate	5418.00							
Moving and resetting of stones Page No.270. No.37.57	Nos							
at cross road (suggappa cut)		2	200.00			400.00		
at cross road		2	165.00			330.00		
						730.00		
				0.45		1622.22		
						3604.94	104.94	378302.22
Basic Rate	99.00							
Area Weightage 6%	5.94							
Grand Total	104.94							

Description of item	Unit	No	L	B	D	Qty	Rate	Amount
RRB 800-1. Painting 3 coats after filling the hole with synthetic emul paint in approved grades on new plastered concrete surfaces, with materials, labour complete per specifications. MORTH Chapter 8 Page 1st cross road (suggappa layout)	sqm							
1st cross road		2	200.00	0.45		180.00		
2nd cross road		2	165.00	0.45		148.50		
						328.50	84.80	27856.80
Basic Rate	80.00							
Area Weightage 6%	4.80							
Grand Total	84.80							
Construction of granular sub-base Grading-V as sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/trap/basalt material, mixing by mix in place method rotavator at OMC, reading in uniform layers with motor grader on prepared surface and compacting with vibratory roller to achieve the 98 proctor density, complete as per specifications. Clause 401 MORTH V Revision. Page 153. Item No.20.6	cum							
1st reaches 1st cross road (suggappa layout)		1	3.50	2.50	0.15	1.31		
		1	2.00	2.50	0.15	0.75		
		1	3.20	1.50	0.15	0.72		
		1	3.80	1.50	0.15	0.86		
		1	5.20	3.60	0.15	2.81		
		1	3.80	2.90	0.15	1.65		
		1	15.00	1.20	0.15	2.70		
		1	3.60	2.20	0.15	1.19		
		1	15.00	1.80	0.15	4.05		
		1	8.00	3.50	0.15	4.20		
		1	9.00	3.20	0.15	4.32		
		1	6.00	3.80	0.15	3.42		
		1	6.60	4.20	0.15	4.16		
		1	16.00	1.50	0.15	3.60		
SSB UGD cutting portion		1	90.00	2.00	0.15	27.00		
						62.73	1855.00	116372.50

Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
Basic Rate	1750.00							
Area Weightage 6%	105.00							
Grand Total	1855.00							
RRB M400-17. Providing, spreading and compacting crushed stone aggregates of granite / trap / salt to wet mix macadam specifications including pre wetting the material with water at 10% in mechanical mix plant triage of mixed materials by paver to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve desired density complete as per specifications. MORTH Specification No. 406. Page No. 5. Item No 20.18	cum							
road reaches 1st cross road (Siddagappa layout)		1	3.50	2.50	0.15	1.31		
		1	2.00	2.50	0.15	0.75		
		1	3.20	1.50	0.15	0.72		
		1	3.80	1.50	0.15	0.86		
		1	5.20	3.60	0.15	2.81		
		1	3.80	2.90	0.15	1.65		
		1	15.00	1.20	0.15	2.70		
		1	3.60	2.20	0.15	1.19		
		1	15.00	1.80	0.15	4.05		
		1	8.00	3.50	0.15	4.20		
		1	9.00	3.20	0.15	4.32		
		1	6.00	3.80	0.15	3.42		
		1	6.60	4.20	0.15	4.16		
		1	16.00	1.50	0.15	3.60		
SSB UGD cutting portion		1	90.00	2.00	0.15	27.00		
						62.73	2001.28	125549.30
Basic Rate	1888.00							
Area Weightage 6%	113.28							
Grand Total	2001.28							

Description of item	Unit	No	L	B	D	Qty	Rate	Amount
RRB M500-6. Providing ● Applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at a rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 2 of MORTH V Division(P.No-158,I No-21.6)	sqm							
road reaches 1st cross road (suggappa layout)		1	3.50	2.50		8.75		
		1	2.00	2.50		5.00		
		1	3.20	1.50		4.80		
		1	3.80	1.50		5.70		
		1	5.20	3.60		18.72		
		1	3.80	2.90		11.02		
		1	15.00	1.20		18.00		
		1	3.60	2.20		7.92		
		1	15.00	1.80		27.00		
		1	8.00	3.50		28.00		
		1	9.00	3.20		28.80		
		1	6.00	3.80		22.80		
		1	6.60	4.20		27.72		
		1	16.00	1.50		24.00		
VSSB UGD cutting portion		1	90.00	2.00		180.00		
						418.23	28.62	11969.74 ✓
Basic Rate	27.00							
Area Weightage 6%	1.62							
Grand Total	28.62							
RRB 500-2. Cleaning the existing black topped road surface with brooms, soft brushes and finally dusting with old gunny bags and /or compressed air to receive uniform treatment including supply of all materials, labour, hire of machineries complete as per specifications. MORTH specification clause 501 Page 158. Item No.21.2	Sqm							
cross road (suggappa layout)		1	200.00	6.80		1360.00		

Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
$(5.5+6+7+7.2+7.5+7.5)/6=$ 6.8 avg						1360.00	5.30	7208.00
Basic Rate	5.00							
Area Weightage 6%	0.30							
Grand Total	5.30							
RRB M500-17. Providing and laying Dense Graded luminous Macadam using washed aggregates of specified grading, mixed with VG30 grade luminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification No. 507. Using 10/120 TPH capacity HMP with sensor paver Gr-II (50mm to 75mm) with 4.5% VG-30 Bitumen. Page No.160	Cum							
3M								
at cross road (suggappa route)		1	200.00	6.80	0.05	68.00		
$(5.5+6+7+7.2+7.5+7.5)/6=$ 6.8 avg						68.00		
						68.00		
Basic Rate	6405.00							
Area Weightage 6%	384.30							
Grand Total	6789.30							
RRB 500-7. Providing and applying tack coat using 100 grade bitumen (10) on the prepared black topped surfaces at 0.25 kg per sqm, heating bitumen in boiler and with spray set (excluding lining of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Chapter 5 Page No.158. Item 21.7	Sqm							

Description of Item	Unit	No	L	B	D	Qty	Rate	Amount
cross road (suggappa out)		1	200.00	6.80		1360.00		
$(5.5+6+7+7.2+7.5+7.5)/6=$ 6.8 avg						1360.00	12.72	17299.20 ✓
Basic Rate	12.00							
Area Weightage 6%	0.72							
Grand Total	12.72							
providing and laying luminous concrete 40mm thick with hot mix plant, using crushed aggregates specified grading, mixed with bituminous sand and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth heeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V specification as per IRC SP- 53- 15 do- using 40-60 TPH capacity HMP with mechanical over grading II (30-45mm) with 5.4% of modified luminous binder consisting 4.97% of VG-30 bitumen (70 grade) and 0.43% of styromeric thermoplastics (white plastic) Page No. 171. Section No. 21.78.12								
Cum								
cross road (suggappa out)		1	200.00	6.80	0.04	54.40		
$(5.5+6+7+7.2+7.5+7.5)/6=$ 6.8 avg						54.40	7753.90	421812.16 ✓
Basic Rate	7315.00							
Area Weightage 6%	438.90							
Grand Total	7753.90							

Description of item	Unit	No	L	B	D	Qty	Rate	Amount
providing and fixing of retro-reflectors, cautionary, advisory and informatory signs as per IRC:67 made of high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel single angle iron post 75 mm x 75 mm x 6 mm firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete 45 cm x 45 cm x 60 cm below ground level as per approved layout	Nos	2	100.00			200.00		
						200.00	137.80	27560.00
Basic Rate	130.00							
Area Weightage 6%	7.80							
Grand Total	137.80							
SRRB M800-4. Direction and Place Identification signs / Project information board with size more than 9 sqm Size Board:- providing and erecting section and place identification retro-reflectors sign as per IRC:67 made of high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 2 mm thick with area not exceeding 9 sqm supported on a mild steel single angle iron post 75 mm x 6 mm, 2 Nos. firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete 45 x 45 x 60	Sqm	4				4.00		
						4.00	7567.34	30269.36
Basic Rate	7139.00							
Area Weightage 6%	428.34							
Grand Total	7567.34							

Description of item	Unit	No	L	B	D	Qty	Rate	Amount
RB M800-13. Road ing with Hot Applied oplastic Compound Reflectrising Glass Is on Bituminous ace:- Providing and g of hot applied oplastic compound 2.5 thick including storising glass beads at gms per sqm area, ness of 2.5 mm is sive of surface applied beads as per IRC:35. finished surface to be uniform and free from ks and holes complete as pecifications MORTH ross road (suggappa it)	Sqm							
		1	134.00	0.10		13.40		
		2	200.00	0.15		60.00		
						73.40	454.74	33377.92
Basic Rate	429.00							
Area Weightage 6%	25.74							
Grand Total	454.74							
Total construction cost								2670694.64
GST 12%								320483.36
Total								3000000.00
(Rupees thirty lakh Only)								

CERTIFICATE

work spot has been inspected and the work is found necessary.
estimate is prepared as per C.S.R. of 2018-19
provisions were made in this estimate are necessary and adequate.
works come under B.B.M.P. limits.

[Signature]
stant Engineer

[Signature]
Executive Engineer
Yelahanka Division
Bangalore-64

[Signature]
Assistant Executive Engineer
Yelahanka Sub Division
Bangalore-64

Administrative Approval

Accorded For *RS 30.00 lakhs only*
Head of A/C... *P 3726*
CER NO : *249* Dt: *23/03/2020*

[Signature]
[TA]

[Signature]
[CE (YNK)]

Technical Sanction

Accorded For *RS 30.00 lakhs only*
Head of A/C... *P 3726*
CER NO : *361* Dt: *23/03/2020*

[Signature]
[TA]

[Signature]
[CE (YNK)]